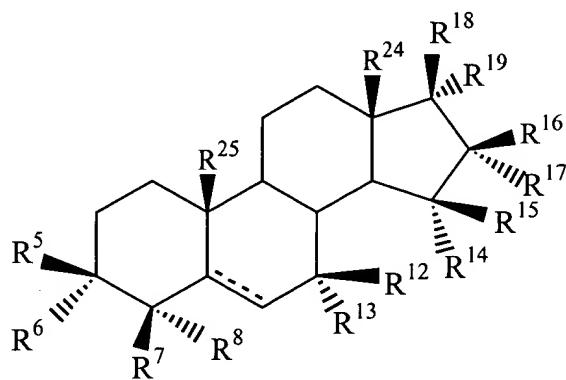


AMENDMENTS TO THE CLAIMS

This listing of claims replaces any prior version of the claims in the application.

5 Claims 1-32 (cancelled).

33 (withdrawn): A pharmaceutical composition comprising at least one compound of the following structure



10 wherein R⁵ and R⁶ are each independently selected from the group consisting of OC(O)OCH₃, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer, provided that at least one of R⁷ and R⁸ are OC(O)OCH₃;

15 wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether,

an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally

5 substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹² and R¹³ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one each of R¹² and R¹³ or R¹⁸ and R¹⁹ can independently be H;

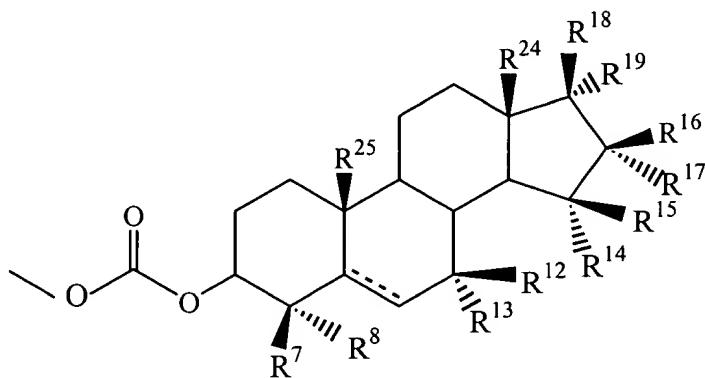
10 wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

15 wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration;

and a pharmaceutically acceptable excipient.

34 (withdrawn): The pharmaceutical composition of claim 33, wherein said at least one compound has the following structure



20 wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally

substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a

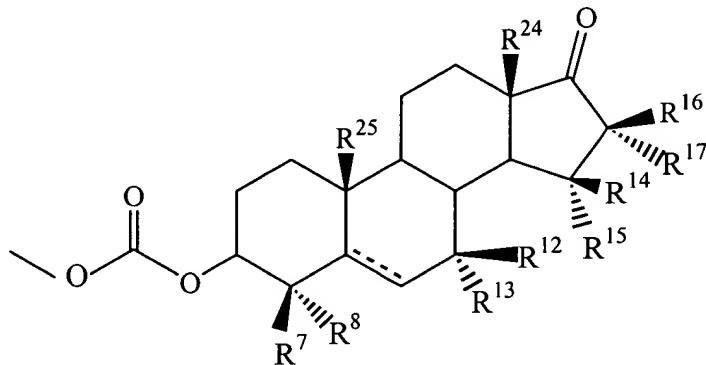
5 nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹² and R¹³ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one each of R¹² and R¹³ or R¹⁸ and R¹⁹ can independently be H;

10 wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

15 35 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure



wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶ and R¹⁷ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a

20 phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle,

an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹² and R¹³ together, R¹⁴ and R¹⁵ together, and R¹⁶ and R¹⁷ together independently form a

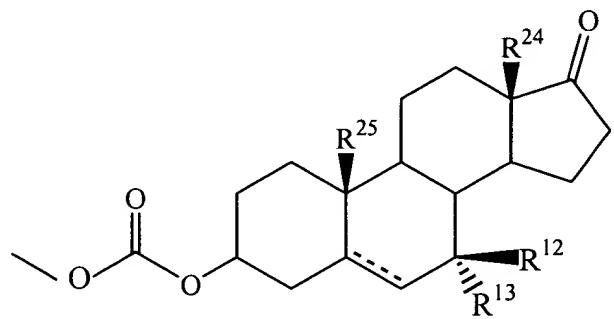
5 double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of each of R¹² and R¹³ can independently be H; wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration;

10 and a pharmaceutically acceptable excipient.

36 (withdrawn): The pharmaceutical composition of claim 35, wherein said at least one compound has the following structure



15 wherein R¹² and R¹³ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an

20 optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R¹² and R¹³ together form a double

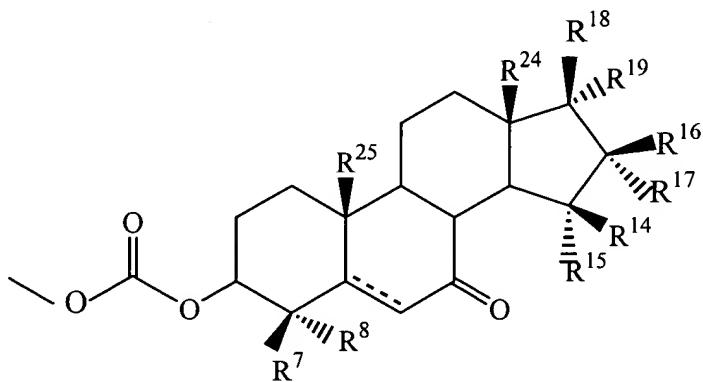
bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of R¹² and R¹³ is H;

wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

5 wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

37 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure



wherein R⁷, R⁸, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl

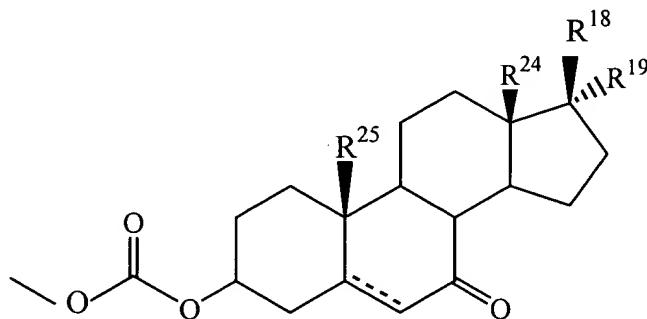
15 group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together

20 independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of each of R¹⁸ and R¹⁹ can be H;

wherein R²⁴ and R²⁵ are either H or CH₃;
 wherein the dotted line is an optional double bond;
 wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

5

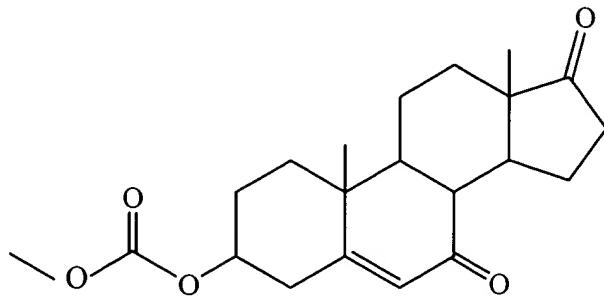
38 (withdrawn): The pharmaceutical composition of claim 37, wherein said at least one compound has the following structure



wherein R¹⁸ and R¹⁹ are each independently selected from the group
 10 consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an
 15 optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R¹⁸ and R¹⁹ together form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH,
 20 provided that only one of R¹⁸ and R¹⁹ is -H;
 wherein R²⁴ and R²⁵ are either H or CH₃;
 wherein the dotted line is an optional double bond;
 wherein the -OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

25

39 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure

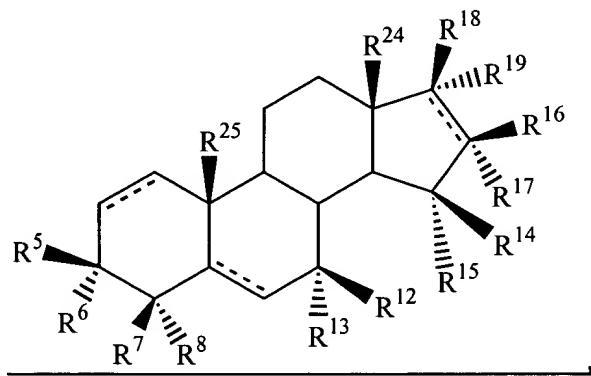


and a pharmaceutically acceptable excipient.

5

Claims 40-55 (cancelled).

Claim 56. (new): A method to treat an androgen responsive disease in a subject, or to ameliorate one or more symptoms, comprising administering to the subject, or delivering to the subject's tissues an effective amount of a formulation comprising one or more excipients and a compound having the structure



wherein,

R^5 and R^6 independently are -H, - OR^{PR} , - SR^{PR} , - $N(R^{PR})_2$, an ester, - $NH-C(O)-C1-50$ organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a monosaccharide, an oligosaccharide or a polymer, provided that at least one of R^5 and R^6 is a carbonate;

R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶ and R¹⁷ together or each independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, -OSO₃H, -OPO₃H, =O, =S, =CH₂, =NOH, an ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group or an optionally substituted alkynyl group; and

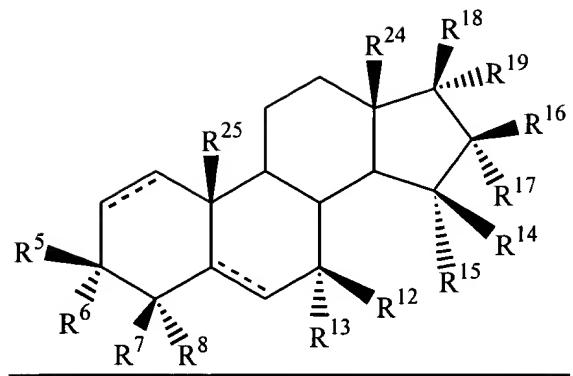
R¹⁸ and R¹⁹ together or each independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, =O, =S, =CH₂, =NOH, an ester, -NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a monosaccharide, an oligosaccharide or a polymer, provided R¹⁸ or R¹⁹ is -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, =O, =S, =NOH, an ester, -NH-C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, a monosaccharide, an oligosaccharide or a polymer;

15 and

R²⁴ and R²⁵ independently are -H, ester, ether or optionally substituted alkyl.

Claim 57. (new): The method of claim 56, wherein the androgen responsive disease is selected from the group consisting of prostate cancer, benign prostatic hyperplasia, breast cancer, alopecia, acne, hypogonadism and hirsutism.

Claim 58. (new): The method of claim 57 wherein the compound has the structure



Claim 59. (new): The method of claim 58 wherein

(a) R^{18} is $-OH$, $-O-C(O)-CH_3$, $-O-C(O)-CH_2CH_3$, and R^{19} is $-H$, $-C\equiv CH$ or $-$

5 $C\equiv CCH_3$, or R^{18} and R^{19} together are $=O$, $=S$ or $=NOH$, or

(b) R^{18} is $-H$, $-C\equiv CH$ or $-C\equiv CCH_3$ and R^{19} is $-OH$, $-O-C(O)-CH_3$, $-O-C(O)-$

CH_2CH_3 .

Claim 60. (new): The method of claim 59 wherein R^7 and R^8 independently

10 or together are $-H$, $-OH$, $-SH$, $-NH_2$, $=CH_2$, $=CHCH_3$, $=NOH$, $=NOC(O)CH_3$, $=O$ or $=S$.

Claim 61. (new): The method of claim 60 wherein R^{12} and R^{13}

independently or together are $-H$, $-OH$, $-SH$, $-NH_2$, $=CH_2$, $=CHCH_3$, $=NOH$,

15 $=NOC(O)CH_3$, $=O$ or $=S$.

Claim 62. (new): The method of claim 61 wherein R^{14} and R^{15}

independently or together are $-H$, $-OH$, $-SH$, $=O$ or $=S$ and R^{12} is $-H$ and R^{13} is $-H$, $-OH$ or $-SH$.

20

Claim 63. (new): The method of claim 62 wherein R^{16} and R^{17}

independently or together are $-H$, $-OH$, $-SH$, $=O$, $=S$, $-O-C(O)-CH_3$ or $-O-C(O)-OCH_3$.

Claim 64. (new): The method of claim 63 wherein R⁵ and R⁶ independently or together are -H, -OH, -SH, =O, =S, -O-C(O)-CH₃ or -O-C(O)-OCH₃.

5 Claim 65. (new): The method of claim 64 wherein R²⁴ is -CH₃, -CH₂OH, -CH₂OC(O)CH₃, -OC(O)CH₃ or -CH₂OC(O)OCH₃ and R²⁵ is -H, -CH₃, -CH₂OH, -CH₂OC(O)CH₃, -OC(O)CH₃ or -CH₂OC(O)OCH₃.

Claim 66. (new): The method of claim 65 wherein R⁷, R⁸, R¹⁴, R¹⁵ and R¹⁷ are -H, R¹⁶ is -H or -OH.

10

Claim 67. (new): The method of claim 66 wherein R²⁴ and R²⁵ are -CH₃.

Claim 68. (new): The method of claim 67 wherein a double bond is present at the 1-2 and 5-6 positions and R²⁴ and R²⁵ are both -CH₃.

15

Claim 69. (new): The method of claim 67 wherein a double bond is present at the 5-6 position and R²⁴ and R²⁵ are both -CH₃.

RESPONSE TO THE NOTICE

A complete listing of claims is included with this paper. The Office sent notice that Applicant's prior amendment was non-compliant because the listing of claims did not contain the text of withdrawn claims. The text of withdrawn claims 5 33-39 are included with this listing. Applicant's amendment should now be compliant.

Hollis-Eden Pharmaceuticals, Inc.,

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Date: Sept 23, 2004

Daryl D Muenchau

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Daryl D. Muenchau, Reg. No. 36,616
Hollis-Eden Pharmaceuticals, Inc.
4435 Eastgate Mall, Suite 400
San Diego, CA 92121
Phone: 858-320-2569
Fax: 858-558-6470